Water Distribution Renewable Energies Energy Recovery LIGHTING SYSTEMS Steam Systems HVAC Systems Renewable HOT WATER SYSTEMS Revenue Recovery STF CONTROLS & INSTRUMENTATION

VOSB \*

Fnergy Recovery STEAM SYSTEMS Electrical STEAM SYSTEMS Builds

03FAC FACILITIES MAINTENANCE AND MANAGEMENT ENERGY MANAGEMENT, WATER CONSERVATION AND SUPPORT SERVICES



GSA CONTRACT NO.: GS-10F-0255L CONTRACT PERIOD: MAY 2001 - MAY 2021 AWARDED SINs: 871-202, 871-203, 871-205, 871-207

2016

# GSA STATEMENT OF QUALIFICATIONS

#### **About Us**

EMP2 is a certified veteran-owned small business (VOSB) established in 1997. We serve federal, public, and private industry customers nationwide. We specialize in energy conservation, pollution prevention, and project management solutions for our customers. We provide energy and program auditing services, development of funding sources, energy engineering services, project facilitation services and project management services.

In December 2010, EMP2 was selected as the sole awardee of the Department of Energy's (DOE) Federal Energy Management Program (FEMP) Energy Savings Performance Contracting (ESPC) Project Facilitation contract. As of January 2016, we have facilitated 90 energy savings performance contracts to award under the ESPC program, with \$1.5 billion in ESCO investment and an excess of \$136 million in annual savings. We have performed over 800 audits for our federal, utility, and commercial customers, and saved over \$4 million in reduced project costs for our customers through application of our detailed review process. This considerable involvement with government facility energy upgrade projects requires that the staff is proficient in the requirements of the Energy Policy Act of 2005 (EPAct 2005), Energy Independence and Security Act of 2007, Executive Order 13693 (2015), and other requirements guiding the reduction of energy use at government facilities. Additionally, due to the two decades of success, we are in the unique position of having unparalleled expertise backed by substantial applicable experience, and solid data.

EMP2 has over 18 years' experience in management and project facilitation of multiple ESPC and UESC projects for DOE. Regionally, we also have nearly two decades of experience in the development of numerous alternatively financed projects, and other energy programs with the Bonneville Power Administration (BPA), PacifiCorp, State of Washington, and several local utilities in the Columbia Basin. These projects include project development, specifying equipment, energy savings and program analysis, commissioning, and M&V. In total, over 800 projects have been successfully implemented. Our customers value the relationship with EMP2's staff of qualified professionals not only in terms of financial value, but also our dedication to a successful project and customer satisfaction.

EMP2 has been proud to contribute to the energy management field from project origin to completion all over the nation for nearly two decades. We use cutting edge technology, continuing education, and innovative engineering methods to remain a leader in the energy management sector. We operate on the foundation of a successful long-term project accomplishment, where savings and user-friendly program interfacing is key.

#### **Latest News**

Rapidly growing business opportunities in the past seven years with regional utilities and federal agencies required expansion of our offices. We have three satellite offices in Western Washington: Vancouver, Olympia, and Bellingham. We also have an office in Saratoga Springs, Utah. Our DOE qualified PF subcontractors in are located in California, Colorado, and Maryland. Our history of success with both our commercial and government customers has enhanced our ability to provide high-quality products, and generate savings for our customers. We have received "exceptional" ratings annually in CPARS for our work with federal customers. We have built lasting relationships by providing services that are tailored to customer requests.

### **PROJECT PROFILES**

- ESPC/UESC Project Facilitation, Documentation & Management
- Measurement and Verification Services, Documentation & Management
- Energy Planning, Options & Strategies
- Energy Choice Analysis & Optimization
- LEED and ENERGY STAR Evaluation
- Risk Management & Mitigation
- Energy Billing & Management
- Management Oversight of the Projects
- Preparation of Contract RFPs & SOWs
- Commissioning and Re-Commissioning
- Identification of Utility/Resource Provider Options
- Existing or New Design Evaluation
- Building & Systems Simulation Modeling
- Renewable Energy Systems & Evaluations
- Existing or Developing Federal Regulation
   & Mandate Compliance
- Life Cycle Cost Analysis
- Personnel Training & Training Materials
- Energy Audits, Baseline Validation & Inspections
- Energy Efficiency Outreach Programs

#### **TECHNICAL EXPERTISE**

EMP2 utilizes cutting edge technology in data collection and analysis tools to help determine potential energy savings by implementing ECMs. The staff is comprised of specialists with varied mechanical and electrical engineering backgrounds that are able to meet the full needs of our customers, such as:

- Steam Systems
- Electrical Distribution
- Water Distribution
- Renewable Energies
- Building Envelope Upgrades
- Controls and Instrumentation
- Lighting Systems
- Motors and Pumps (PSAT Qualified)
- Air Systems
- HVAC Systems
- Boilers and Hot Water Systems
- Energy/Revenue Recovery
- Advanced Metering
- Measurement & Verification
- O&M Program Support
- Commissioning
- Energy and Program Audits

# GSA STATEMENT OF QUALIFICATIONS

2016

# **Staff Qualifications**

EMP2 staff and subcontractors maintain a high degree of diversity and expertise. The staff is comprised of specialists with varied mechanical and electrical engineering backgrounds that are able to meet the full needs of our customers. These backgrounds include process controls, process engineering, project management, LEED AP, professional engineers, pumping specialists, boiler and combined power experience, eQuest (DOE2) model experts, lighting and VFD specialists, commissioning and M&V specialists. We currently have six trained alternative finance Project Facilitators on staff. EMP2's staff has reviewed over 120 ESPC M&V plans for various federal agencies covering a wide range of ECMs, from lighting to wind turbines. This work requires proficiency in the following categories: basic architecture, varied data collection methods, HVAC and integrated controls, energy modeling and simulation, lighting, commissioning, cost estimation, utility data analysis, renewable energy technology, and onsite energy production.

Air Systems Lighting Systems

### **Customer and Solution Oriented**

EMP2 uses a customer-tuned approach in the recommendation and implementation of conservation measures. Understanding the customer's needs, such as the minimization of operation disruption and project coordination time, allows for the implementation of a more effective cost-reducing project. Our main products are innovative ideas by the implementation management services and identification of cost effective solutions to reduce operation costs.

## **Resources, Tools and Methods**

EMP2 utilizes cutting edge technology in data collection and analysis tools to help determine and verifying potential energy savings. The staff is comprised of specialists with varied mechanical and electrical engineering backgrounds that are able to meet the full needs of our customers. These backgrounds include process controls, process engineering, project management, LEED, professional engineers, pumping specialists, boiler and combined power experience, eQuest (DOE2) model experts, lighting and VFD specialists, and of course Commissioning and M&V specialists.

### **Data Collection and Software**

- FLUKE Model 43b Power Monitor
- Ultrasonic Flow Meter
- Thermography Gun
- Ultrasonic Leak Detectors
- HOBO Loggers
- · Air Flow Meter
- · Light Probe Meter
- Ballast Detector
- PowerSight
- eQuest
- Energy-10
- Motor Master
- Visual DOE
- PSAT
- FSAT
- BLCCA

# **Technical Expertise**

- Steam Systems
- Electrical Distribution
- Water Distribution
- Renewable Energies
- Building Envelope Upgrades
- Controls and Instrumentation
- Lighting Systems
- Motors and Pumps (PSAT Qualified)
- Air Systems
- HVAC Systems
- Boilers and Hot Water Systems
- Energy/Revenue Recovery
- Advanced Metering
- M&V Support
- O&M Program Support
- Commissioning
- Energy Audits



# **Safety Comes First**

EMP2 is pleased to report that we have maintained a stellar safety record resulting from our work supporting our commercial, industrial and government customers. We have never had a lost time accident or damage to any customer equipment from our audits or from implementation of any recommended ECM. Our staff undergoes biannual training for workplace safety. Moreover, we have a comprehensive Business Code of Ethics that is updated annually. A copy of this document is available to our current and future clients for review upon request.

TEALA CVCTEL

Boilers & Building E

**GSA STATEMENT OF QUALIFICATIONS** 

2016

### **Putting Energy Solutions to Work**

Workplace productivity, resource efficiency, and environmental stewardship have become a key focus of modern commercial, industrial, and governmental pursuits. To achieve both of these goals, a solid energy and resource conservation and management strategy is a vital element. EMP2 provides consulting, engineering and contractual review services toward these goals, often realizing additional benefits as well. These include reduced pollution, minimized waste generation and the liability that they carry, and more convenient and reliable performance of mechanical and electrical systems, greater occupant comfort and simplified or reduced maintenance burdens.

### **Measurement and Verification**

EMP2 provided consultation and co-authored the newly updated M&V Guidelines: Measurement and Verification for Performance-Based Contracts, Version 4.0 (November 2015), based on the updates to the IPMVP M&V that have occurred in recent years. EMP2 has also written an M&V Guideline that is currently used by the Department of Veterans Affairs for use on specific energy projects where developing energy baselines and tracking energy efficiency is paramount to project success. Our staff has also developed M&V and energy training modules for the DOE FEMP that are currently in use for scheduled training and webinars.

EMP2 is the sole contractor to provide Project Facilitation (PF) services for DOE's Federal Energy Savings Performance Contract (ESPC) Program. We are tasked with reviewing baseline and M&V methodologies for numerous federal clients that have engaged in ESPCs since our company's inception in 1997. As a part of EMP2's work scope, PFs ensure that proper M&V methodologies are developed appropriately and accurately to ensure the proposed guaranteed savings will be verified through the methodology. Overall, this work requires expertise in diverse high-performance mechanical and electrical equipment and onsite energy production, water and plumbing equipment to optimize conservation, emerging renewable technologies, varied data collection methods, energy modeling, cost estimation, commissioning, utility data analysis, along with the all-important M&V activities that verify measure savings and promotes energy savings persistence. EMP2's staff has reviewed over 120 ESPC M&V plans for various federal agencies covering a wide range of ECMs, from lighting to wind turbines. We have performed in-depth forensic work for the United States Army at Fort Richardson, GSA White Oak, and Leo O'Brian Federal Building over the last decade.

EMP2 has been a technical service provider for PacifiCorp, Rocky Mountain Power for 15 years, plus BPA's Industrial Program and Commercial Program for 18 years. We perform a wide range of energy audits for the purpose of identifying ECMs, conduct post-inspection M&V reports, and developing deemed savings calculators for BPA's deemed savings programs. We have performed these audits for a wide variety of commercial, industrial, and agricultural customers.

# **Training**

EMP2 has been involved with the development of ESPC methodology, training of project facilitators and agency staff, and other project stakeholders. In these capacities, EMP2 has been, and continues to be, involved in creating and delivering numerous presentations at DOE meetings, PF conferences, DOE workshops, and GovEnergy conventions. EMP2 has participated in team efforts supporting and developing M&V, commissioning, retro-commissioning, project facilitation certification, and many other aspects of performance contracting through the use of ESPCs and UESCs.

# **Regional Field Audits**

EMP2 has been a technical service provider for PacifiCorp/Rocky Mountain Power for the last 15 years. We have performed over 800 energy audits for the purpose of developing ECMs that will save energy while maintaining building process functionality. EMP2, continues to work with BPA, performing a wide range of energy audits for the purpose of identifying ECMs, conducting post inspection M&V reports and developing deemed savings calculators for BPA's deemed savings programs

# **Reneweable Energy Program Support**

EMP2 has participated in several renewable generated power projects, both within ESPCs and as standalone projects. These projects include wind, photovoltaic, and biomass generation methods. EMP2 has successfully written Purchase Power Agreements, assisted in power grid engineering assessments that allow connectivity to the regional grid and negotiated energy sale prices to the regional grid. EMP2 staff has evaluated the technical aspects, cost estimates, available utility and tax incentives, and supported agency evaluations on environmental issues. EMP2 has facilitated resolution of project location issues and have analyzed project financial data determining the total effect of project implementation upon the client.

# **Professionalism and Results**

Successful project performance is contingent on a good, well-established, and invested team. EMP2's staff prides themselves on the ability to work closely with clients to identify the project needs and to continue client involvement in the process. We have been rated "exceptional" in CPARS for our work for federal customers on an annual basis. We have no bias toward a particular manufacturer or company. We are in the business of creating valuable, meaningful products for our clients. We do so by performing exemplary work, embodying professionalism in all aspects of our business relationships, and setting the standard for quality in our field. The client-identified timeline is extremely important to the staff of EMP2, and is rigorously adhered to. A quality and professional work product delivered in a timely manner is a fundamental principle of EMP2's business model.

### **Current Clients**

- Department of Energy
- General Services Administration
- · Department of Justice, Bureau of Prisons
- United States Department of Agriculture
- Environmental Protection Agency
- United States Army
- National Renewable Energy Lab
- Bonneville Power Administration

- United States Coast Guard
- United States Forest Service
- Department of Veterans Affairs
- · Department of Defense
- Department of Homeland Security
- PacifiCorp/Rocky Mountain Power
- Benton REA
- JC Chang and Associates



"EMP2 has earned my total support to be in the field representing the best interest of the Federal Government in ESPC projects. Projects that are facilitated by EMP2 are technically very sound and survive audits with minimal comments. EMP2 has repeatedly demonstrated exemplary judgment and communications skills. EMP2 has executed their responsibilities with outstanding professionalism. I have found EMP2 Project Facilitators, along with their support staff, to be extremely objective, communicative, cooperative, technically competent and positively responsive to trust. I find working with EMP2 to be professionally fulfilling. It is a pleasure to tackle each project with EMP2."

- Department of Energy, Golden Field Office

"I have been fortunate to have worked with EMP2 on eight of our multi-million dollar Energy Savings Performance Contracts. EMP2 has been instrumental in helping us develop our ESPC contract alternative. EMP2 staff has provided knowledge, insight, data, recommendations, and expertise to help insure these large multi-year projects get off to a successful start, as well as a productive performance phase. I look forward to continuing our work with EMP2, and would highly recommend them for any professional facilitator/consulting management services."

- Federal Bureau of Prisons, Field Acquisition Office

"EMP2 staff members have always displayed a high degree of integrity, responsibility and resourcefulness."

- National Renewable Energy Laboratory

"Our Idaho customers are very happy with EMP2's work. Our experience with EMP2 has been very positive. Many thanks for your team's hard work.

- Rocky Mountain Power

Our PFs went above & beyond on our two ESPC projects. The PF's deep familiarity with systems, as well as the ESPC type program, was instrumental in getting us to that contract award point. The PFs easy demeanor made all parties comfortable, but that didn't mean he would roll over when something wasn't right. A perfect mix of firmness & congeniality.

- General Services Administration, **National Deep Retrofit Challenge** 

"EMP2 has repeatedly performed work of the highest quality. EMP2 has always completed their assignments within given time frames and budgets and provided our firm with a quality product that raised the standard for other sub-consultants."

- JC Chang & Associates

Boilers &

# **GSA ITEM CONTRACT AWARD**

# 871-202 Energy Management Planning and Strategies Energy Management

- Project management and project facilitation assistance for successful energy projects
- Development of energy management programs in accordance to the NECPA, EPAct 2005, EISA 2007, federal guidance, and Executive Order 13693 (2015).

### **Project Development**

- · Strategic planning and project scope development
- Resource Conservation Engineer: staffing, training and program development
- Survey and resource billing audits and verification
- Effective ECM feasibility analysis
- Model energy savings with multilevel probability scenarios using non-proprietary software
- · Life cycle cost analysis and energy usage analysis
- · Baseline energy and resource development
- Existing and/or new design documentation
- Identification of utility or resource-provider options
- · Survey and resource billing audits and verification

### Project Implementation and M&V

- Startup and commissioning of equipment
- Implementation of cost-effective control system methodologies
- Prepare project documentation in support of federal or state programs such as energy project approval packages (i.e. FEMP, etc.)
- Perform energy management applicability studies to facilities to achieve compliance with regulations.
- Training of personnel for efficient O&M of new equipment; ESPC's, including M&V protocols
- Energy management and efficiency education and training classes for personnel to assist the agency in reaching energy reduction goals
- M&V of energy savings of new ESPCs, historical forensic analysis, utility incentive commercial and industrial programs

#### 871-203 Training on Energy Management

- Training of personnel for efficient operation and maintenance of new equipment
- ESPC process and management training
- Critical analysis methodology to balance advantages and disadvantages (financial, mechanical, etc.) choices for energy systems and their overall implications
- Education for individual personnel on energy reduction behavior and strategies
- Mitigating risk with energy system modification or upgrade
- Assistance in understanding and the completion of energy efficient building certification programs such as LEED

#### 871-205 Energy Program Support Services

Including, but not limited to, billing and management oversight and assistance in preparing energy services related agency statements of work. Energy efficient buildings certification programs:

- LEED Evaluation
- Energy Star Evaluation
- Energy Awareness Programs
- Evaluation of existing energy programs against current executive orders and federal law

#### 871-207 Energy Audit Services

EMP2 has the experience and can assist in all aspects of energy audits, including preliminary feasibility, investment grade, baseline control and evaluation auditing. These capabilities include, but are not limited to:

- Project management and project facilitator assistance for successful energy audits
- · Budget determination for auditing
- Energy and resource billing audits and verification
- Energy usage analysis to determine the effects of weather, occupancy, etc.
- Baseline energy audits
- Existing and/or new design baseline documentation
- Measurement and verification of energy savings
- Annual "true-up" audits and baseline validation
- Prepare project documentation in support of federal or state programs (i.e. FEMP, etc.)





grades Water Distrib

Energies Boilers & Hot Water
Page 6
Building Envelope U



HOT WATER SYSTER

Revenue Recovery



CONTRACT PERIOD: MAY 2001 - MAY 2021

GSA CONTRACT NO.: GS-10F-0255L

**Rates** 

The rates below apply to all assigned SINs, including:

• 871-202 Energy Management Planning and Strategies

871-203 Training on Energy Management
 871-205 Energy Program Support Services

• 871-207 Energy Audit Services

# **Labor Categories: Prime Contractor Rates**

	Senior Project Manager	Senior Engineer	<b>Engineering Specialist</b>
Current Year (5/1/2015-4/30/16)	\$157.44	\$78.80	\$67.98
Option Year 1: (5/1/16 - 4/30/17)	\$162.01	\$81.09	\$69.95
Option Year 2: (5/1/17 - 4/30/18)	\$167.51	\$83.84	\$72.33
Option Year 3: (5/1/18 - 4/30/19)	\$173.54	\$86.86	\$74.93
Option Year 4: (5/1/19 - 4/30/20)	\$179.79	\$89.99	\$77.63
Option Year 5: (5/1/20 - 4/30/21)	\$186.26	\$93.23	\$80.43

Rates are based on the "current year" (2015) EMP2 GSA contract escalated by using the tables from The Budget and Economic Outlook 2015 to 2025. Please see Employment Cost Index on page 155 of the Report.

 Senior Project Manager Facilitates, coordinates and directs a number of large projects. Supervisors others. Establishes project schedules and coordinates with customer the technical development & review of projects for ESPC's, UESC's and Utility programs. BS, MS degree with 10+ years of experience. PE or AEE Certified in applicable energy areas.

Senior Engineer

Facilitates, coordinates and directs a number of small to large projects. Supervises others. Establishes project schedules and coordinates with customer the technical development & review of projects for ESPC's, UESC's and Utility programs. BS degree with 5-10 years of experience. Fundamentals of Engineering Certified or AEE Certified in applicable energy areas.

Engineering Specialist Performs specific, limited portions of a broader assignment managed by experienced engineer, applies expert knowledge of relevant specialty. Two years technical or college with 1-4 years of experience

# **Additional Contract Information**

Maximum Order Limitation:\$1,000,000.00Minimum Order:\$100.00Geographic Coverage (Delivery Area):FOB Domestic

**Travel:** Contractor travel will be IAW the Federal Travel

Regulation 31.205-46, as applicable

• Government purchase cards are accepted or not accepted above the micro-purchase threshold: Yes

Notification regarding registration in Central Contractor Registration (CCR) database: Yes

• Data Universal Numbering System (DUNS) number: 13-7936964

Pricing Clause Revision to Extend the Term of the Contract (Evergreen) I-FSS-163

GSA Solicitation TFTP-EJ-000871-B Energy Management Services